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ARNOLD S WEINTRAUB
WEINTRAUB & BRADY
30200 TELEGRAPH ROAD
SUITE 444
BINGHAM FARMS MI 48025

EXAMINER	
BOCCIO, V	
ART UNIT	PAPER NUMBER
2712	

DATE MAILED: 03/17/98

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Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

Office Action Summary

Application No.

08/453,393

Applicant(s)

Schwab

Examiner

Vincent F. Boccio

Group Art Unit

2712



☒ Responsive to communication(s) filed on 12-22-97 Amendment-B

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-14 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-14 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2712.

Response to Amendment

1. Applicant's arguments filed 12-22-97, "Amendment-B" and "Supplemental Amendment", filed on 01-06-98 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
3. Claims 1-5 are rejected under 35 U.S.C. § 103 as being unpatentable over the background of the invention of Piosenka et al. (US 4,993,068) and Blonstein et al. (US 5,319,724).

Regarding claim 1, the background of Piosenka et al., discloses a secure identification system utilizing physical traits comprising: at least one centralized computer/database or repository storing a database of image files(see col. 1, lines 60-62, **"The centralized data base serves as the repository for previously stored physical traits"**); a plurality of remote terminals(see col. 1, lines 58-60, "Typically, these distributed **access control points** are **linked** via a centralized database.") in operative communication with the centralized computer and wherein

the comparisons are made with at least image files stored in the centralized database(see col. 1, line 55 to col. 2, line 9).

The background of Piosenka et al., fails to disclose wherein the images stored in the centralized database are compressed.

Blonstein et al. teaches compression of still images utilizing JPEG. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the background Piosenka et al. by incorporating the JPEG still image compressing technique to images as taught by Blonstein et al. in order to decrease memory requirements for storage of images and would decrease transmission time of image files due to the reduction of the amount of data.

The background of Piosenka et al. fails to particularly disclose means located at the site of each remote terminal for information to be verified. Now, the background of Piosenka incorporated with the teaching of Blonstein et al., providing image files in compressed form at the centralized database, it is considered obvious to one of ordinary skill in the art to provide a comparison means to compare image files at the remote site due to the advantage of compressed images are transferred at a faster rate and will utilize less time in the overall process of the transfer and comparison of the files.

Regarding claim 2, the background of Piosenka et al. further discloses means located at a remote data terminal for gathering

image-related information(see col. 1, lines 56-58 "fingerprint, retinal scans and dynamic signatures") for comparison with an image file stored at a centralized computer(see col. 1 line 65 to col. 2, line 3, "matches the data from the remote access control point with the **pre-stored data** retrieved from the data base").

Regarding claim 3, the background of Piosenka et al. fails to particularly disclose means for gathering image-related information including video camera to input a video image of an individual to be verified. The examiner takes official notice it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the background of Piosenka et al. by providing a video camera to provide a video image of an individual in order to increase the security potential by the additional physical trait used in comparing physical traits to allow for requested access.

Regarding claim 4, the background of Piosenka et al. does provide for signatures to used for security, but fails to specifically call out a graphical input device having a stylus with which an individual to be verified may input a signature. It is considered inherent that means for gathering image-related information may include a graphical input device having a stylus with which an individual to be verified may input a signature(see col. 1, line 58 "dynamic signatures").

Regarding claim 5, the background Piosenka et al. further discloses means for gathering image-related information includes means for imaging a fingerprint of an individual to be verified(see col. 1, line 57 "fingerprints").

4. Claims 6-7, 9-11 and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over background of Piosenka et al.(US 4,993,068) in view of Schireck(US 5,306,049).

Regarding claim 6, the background of Piosenka et al., discloses a secure identification method, comprising the steps of: capturing a first graphical representation of a subject at a first data terminal, transferring and receiving the first graphical representation of the subject at a centralized computer and storing the information representative of the subject at the centralized database and receiving a request from a user and inputting a second graphical representation of the subject, downloading, comparing and authenticating(see col. 1, line 55 to col. 2, line 9).

The background of Piosenka et al. and Schireck fail to particular disclose storing information of the subject in a relational database disposed at the location of the centralized computer. Schireck teaches utilization of a relational database to store digitized images. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify by background of Piosenka et al. as taught by Schireck

in order to provide a more sophisticated means of tracking and recording the authentication of digitized files as taught by Schireck(see col. 2, line 66 to col. 3, line 5).

The background of Piosenka et al. and Schireck fail to disclose comparison being done at the remote site. It is considered an obvious design choice to provide a means to compare and do comparisons at remote sites, due to the advantage of alleviating the central computer from performing comparisons intern it would be possible to service more transfer requests in less time.

Regarding claim 7, it is considered inherent that the first and second data terminals are the same for the purpose of performing the same function.

Regarding claim 9, the combination of the background of Piosenka et al. and Schireck fails to particularly disclose providing a graphical representation of the subject being a facial likeness of an individual. The examiner takes official notice it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of the background of Piosenka et al. and Schireck by providing a video camera to provide a graphical representation of a subject in order to increase the security with the additional physical trait.

Regarding claim 10, the background Piosenka et al. further discloses providing a graphical representation of the subject being a fingerprint(see col. 1, line 57 "fingerprints").

Regarding claim 11, it is considered inherent that the subject being inanimate, because it is necessary for the image/subject be captured as still to be compared to allow the analysis to be performed and have repeatability.

Regarding claim 12 and 13, the combination of the background of Piosenka et al. and Schireck fail to particularly disclose providing at the plurality of remote terminals a database of subject graphical representations for the purpose of making localized comparisons. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of the background of Piosenka et al. and Schireck by providing the remote terminals with a means to store the database of subject graphical representations due to the possibility of the central repository going off line making transfer and comparison impossible during down time.

Regarding claim 13, the background of Piosenka et al. discloses well known encryption(see col. 2, line 5-9) of data transferred to and from the central database repository for security, but fails to particularly disclose databases of the plurality of remote data terminals being encrypted to that a particular data terminal cannot interpret the database of

another. It is considered obvious to one of ordinary skill in the art at time of the invention to encrypt database information of the plurality of remote data terminals to provide an additional security to protect against unauthorized users (computer hackers), which may gain access to the system, but would not be able to access encrypted image database information without an encryption code or key.

Claim 14 corresponds to claim 6 and is analyzed and discussed with respect to claim 6, having an additional limitations of associating (Images {previous} with Images {new}, Fingerprints {previous} with Fingerprint {new} etc.) the graphical representations ("Images etc. from a remote site") with an at least one computer activation datum ("Previously stored images in the storage means") and furthermore, the combination of Piosenka et al. and Schireck fail to particularly disclose downloading from the centralized computer, information representative of the previously stored graphical representation of the subject. The combination of Piosenka et al. and Schireck disclose providing information representative of a subject to the central depository, where the information can be received, stored, compared to provide authentication of the information to approve/deny user access. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of Piosenka et al. and Schireck by

downloading to remote sites to perform the comparison at remote sites to alleviate processing power of the centralized computer due to a multitude of connections to and from remote sites or terminals and further, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

5. Claim 8 is rejected under 35 U.S.C. § 103 as being unpatentable over the combination of background of Piosenka et al.(US 4,993,068) and Schireck(US 5,306,049) in view of Blonstein et al.(US 5,319,724).

Regarding claim 8, the combination of background of Piosenka et al.(US 4,993,068) and Schireck(US 5,306,049) fails to disclose wherein the images stored in the centralized database are compressed. Blonstein et al. teaches compression of still images utilizing JPEG. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of the background Piosenka et al. and Schireck by incorporating the JPEG still image compressing technique to images as taught by Blonstein et al. in order to decrease memory requirements for storage of images and would decrease transmission time of image files due to the reduction of the amount of data.

Response to Arguments

With respect to the arguments presented, it is difficult to follow both amendments with the second amendment making changes

to the first amendment. The examiner will make a good attempt to answer all relevant arguments with respect to the first amendment being modified by the second amendment.

(1) In re pages 4-11, claims 1-13, applicant states "the background of Piosenka is deficient. Applicant argues that the background thereof is presently in terms too broad and too general for it to sufficiently enable one skilled the art to practice the invention. Otherwise, in practicing the invention, the result would lead to pure speculation by one skilled in the art because of the absence of a detailed description of the components of the disclosed prior art."

In response the examiner respectfully disagrees. The argument based on broadness is considered irrelevant. Firstly applicant fails to point out what claimed limitations with respect to "broadness" that the background of Piosenka fails to teach, but applicant continues to argue that there are not enough details disclosed so that one of ordinary skill in the art would be able to build the invention. The specific details that Piosenka relies are considered well known to one of ordinary skill in the art. The examiner directs attention to Piosenka et al. at col. 2, lines 10-15 where Piosenka et al. states "One such system as that described immediately above, as shown in U.S. Pat. No. 4,438,824, issued on March 27, 1984, to C. Mueller-Schloer for an invention entitled "Apparatus and Method for Cryptographic

Identity Verification". In conclusion, one of ordinary skill in the art would have been presumed to have been aware of **all prior art** existent at the **time the invention was made**, thereby providing the details required to make and use the invention.

(2) In re page 5, applicant states "The background of Piosenka provides only a single centralized database, whereas the **claims** of the present invention **may include** a plurality of centralized databases." and "In contrast, the claims of the present invention include at least one centralized database or server and thus, may comprise a plurality of centralized databases." and "Claim 1 of the present invention provides for "a plurality of remote terminals in operative communication **with one or more** of the centralized computers..., wherein the background of Piosenka provides only a single centralized database refers only to a single remote site".

In response the examiner respectfully disagrees. Firstly the examiner fails to find a limitation claiming "a plurality of databases". Secondly, since the invention **may include** or comprises **at least one** centralized database, the examiner asserts that the claimed **at least one centralized database** is met by the single disclosed centralized data base. Furthermore, the applicant is in clear error in interpreting the passage of the background of Piosenka et al., the examiner direct attention to

col. 1, lines 55-60, where in the background Piosenka et al. states:

"Still other systems provide for security through the use of various user specific physical traits. These physical traits include fingerprint, retinal scans, voice patters and dynamic signatures. Typically, these distributed access control points are linked via a communication medium to a centralized data base".

The distributed access control points clearly meets the limitation of a plurality of remote terminals.

(3) In re page 6, applicant continues to argue the broadness of the background of Piosenka et al. and asserts that since the primary reference relied upon by the examiner is considered too broad the combination of the background of Piosenka et al. and Blonstein("JPEG Compression") is not possible due to significant modifications" and "The background of Piosenka fails to disclose such incorporation".

In response the examiner respectfully disagrees. With respect to the broadness argument(s), see above reasoning.

Further, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation

to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 19880; *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, incorporating JPEG compression from Blonstein has a clear advantage to one of ordinary skill in the art to reduce the amount of memory used to store images, etc as compared to storing the images/material non-compressed.

(4) In re page 7, claim 6, applicant states "Unlike the claims of the present invention, the background of Piosenka fails to specifically state the manner in which data is transferred and stored into the centralized database system".

In response the examiner respectfully disagrees. Firstly, the applicant must point out what specifically in the claims is not met by the prior art applied. The examine fails to find any details asserted by the applicant in the claims. The only limitation related to what applicant asserts with respect to claim 6 is "transferring", "receiving", "inputting" and "downloading". Clearly, there is no details in the claims describing the "MANNER" in which data is transferred and stored into the centralized database thereby providing any more or less definition with respect to the art applied and what is claimed.

(5) In re page 7, applicant states applicant states "The background of Piosenka fails to specifically provide a first data

terminal which a first graphical of a subject is captured, wherein the first data terminal is distinguished from the second data terminal".

In response the examiner respectfully disagrees. The examiner agrees that the first data terminal can be considered distinguished with respect to the second terminal in that the terminals can be obviously provided at different locations. The background of Piosenka et al. clearly discloses a plurality of remote sites/data terminals(see col. 1, line 59, "Access Control Points") wherein the terminals/control points can be referred to as first, second or any other designation. Furthermore, at col. 1, line 65 to col. 2, line 5, the background of Piosenka et al. clearly discloses entering user traits from "A Remote Site", clearly indicating that any remote site a user can enter physical traits to be compared with "pre-stored data" and since any remote site is capable of entering a user's physical traits, it is considered inherent that at any remote site is capable of entering physical traits, therefore the background of Piosenka et al. clearly anticipates/meets the limitation of "a first data terminal which a first graphical of a subject is captured".

(6) In re page 7, applicant states "In addition, the background of Piosenka further fails to specifically describe that a user at a second terminal performs a request requiring authentication."

and "However, the claims of the present invention provides that a request requiring authentication at a second data terminal".

In response the examiner respectfully disagrees. Clearly, the background of Piosenka et al. in col. 1-2, discloses that at a access control point (AT ANY REMOTE TERMINAL, "FIRST", "SECOND", etc.) a user at a remote cite enters required trait information, thereafter to be compared(authenticated) and if a successful comparison is obtained access is permitted as clearly disclosed by the background of Piosenka et al..

(8) In re page 8, claim 6, applicant states "The background of Piosenka provides that the comparison of traits is performed at the centralized database" and "However the present invention provides comparisons of traits is performed at a remote site".

In response the examiner confirms that the background of Piosenka et al. discloses comparisons being done at the centralized repository, but the applicant should direct attention to the office action(103), the rejection of the comparison of physical traits at a remote site is not anticipated(102) by Piosenka et al., but it is considered an obvious design choice to one of ordinary skill in the art(see rejection) in view of various motivations to modify(see all related motivations).

(9) In re page 8, applicant states, "The applicant states the position that, although Schireck may or may not teach utilization

of a relation data base to store digitized images". Furthermore, applicant continues to argue broadness of the background of Piosenka et al..

In response the examiner respectfully disagrees. Firstly, Schireck clearly discloses a relational database used to store digitized images etc.(see col. 2, line 66 to col. 3, line 5, "Naturally, the registry can be a more sophisticated means of tracking and recording the authentication such as a digitized file in a relational database including a **digitized** image of a **fingerprint** and fields for the other identifying indicia including of the type of sports item"). With respect to the continuing arguments with respect to the broadness of the background of Piosenka et al., see response above.

(10) In re page 9, applicant states "The addition of the means of tracking and recording would be a significant modification to the background of Piosenka".

In response the examiner respectfully disagrees. The argument based on that **a significant modification that would be required** is considered irrelevant, but the means for tracking and recording of information are considered inherent/anticipated with respect to the background of Piosenka et al. thereby to provide a means to perform comparisons. Further, as stated in the office action it is considered obvious in view of the combination of background of Piosenka et al. in view of Schireck, that the means

for tracking, recording and authenticating is met by the combination. Schireck clearly discloses the process of "Tracking", "Recording" and "authenticating" by utilizing a "relational Database", which is considered well known to one of ordinary skill in the art.

(11) In re page 11, applicant states, "the background of Piosenka, Blonstein and Schireck do not contain any suggestion, expressed or implied, that they be combined, or that they be combined in the manner suggested".

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this

action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Fax Contact Information

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communication intended for entry)

or:

(703) 308-5399, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent F. Boccio whose telephone number is (703) 306-3022.

If any attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Andrew Faile, can be reached at 703-305-4380.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 703-305-3900.

V.F.B. *VFB*
March 4, 1998

[Signature]
THAI TRAN
PRIMARY EXAMINER